

## REMARKS

This paper is submitted in reply to the Office Action dated October 19, 2004. A request for a one-month extension of time has been submitted concurrently herewith, along with a check for \$60.00 for the requisite fee. Therefore, the period of response extends up to and includes February 22, 2005, since February 19, 2005 was a Saturday and February 21, 2005 was a holiday. Reconsideration and allowance of all pending claims by the Examiner are respectfully requested.

In the Office Action, the drawings were objected to for Figures 12A-C for not being labeled as prior art and claim 58 was objected to based upon informalities. In addition, claims 1-3, 6-8, 11, 14-15, 19, 22-27, 31, 33, 36,35-36, 38, 41-43 47 and 49-56 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,133,354 to Kallok (Kallok). Furthermore, claims 9, 20, 39, 48 and 58-59 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kallok, and claims 17 and 45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kallok in view of U.S. Patent No. 5, 193,539 to Schulman et al. (Schulman).

Applicant respectfully traverses all of the rejections and objections, as the cited references do not disclose or suggest the invention as recited in any of the pending claims. Nonetheless, Applicant has made amendments to the drawings and claims in deference to the Examiner and to put the case into further condition for allowance. Namely, Applicant has canceled claims 28, 30 and 57, and amended claims 1, 31, 39 and 58. Claims 4-5, 10, 12-13, 16, 18, 21, 29, 32, 34, 37, 40, 44 and 46 are withdrawn from consideration. Applicant has also amended Figs 12A-C per the suggestion of the Examiner and submitted a Replacement Sheet as required by the Examiner, along with an Annotated Sheet Showing the Changes. Withdrawal of the drawing objection is therefore respectfully requested. Applicant respectfully submits that no new matter is being added by the above amendments, as the amendments are fully supported in the specification, drawings and claims as originally filed.

**Amendments to the Drawings:**

The attached sheet of drawings includes changes to Figs. 12A-C. This sheet, which includes Figs. Figs. 12A-C, replaces the original sheet including Figs. Figs. 12A-C.

Attachment: Replacement Sheet for Figs. 12A-C

Annotated Sheet Showing Changes to Figs. 12A-C

Claim 1 generally regards a method for stimulating a musculature that includes slow twitch muscle fibers. The method includes applying a resonant sequence of pulses across the musculature to uniformly initiate a contraction within the musculature. This contraction emulates a natural contraction to permits deeper signal penetration and decreased discomfort, among other benefits. In a sense, these benefits are realized by virtue of the pulses of the resonant sequence being spaced relative to one another such that each pulse subsequent to a first pulse in the sequence is effective to progressively stimulate and create tension in the musculature while maintaining tension created in at least a portion of the musculature by each preceding pulse in the resonant sequence.

None of the cited prior art motivates, teaches or suggests the above stated features. The absence of such a teaching or suggestion within the prior art speaks to the disparate purposes of each cited reference. For instance, Kallock regards an implanted medical device designed to stimulate skeletal muscle tissue, while preventing a contraction (column 2, lines 1-5). In fact, Kallock actually teaches away from initiating a contraction at column 1, lines 58-63, as conventionally requiring too much energy. Because, in part, Kallock fails to teach uniformly initiating a contraction as claimed by Applicant, claim 1 is novel over Kallock, and the rejection of claim 1, as well as of claims 2-3, 6-9, 11, 14-15, 17, 19-20 and 22-27 which depend therefrom, should be withdrawn.

Moreover, because Kallock does not suggest or motivate uniformly initiating a contraction within a musculature, it does not motivate or suggest the claimed content of claims 9, 20, 39, 48, 58 and 59. These claims are consequently patentable by virtue of their respective dependencies on novel and unobvious independent claims. These claims also recite additional features that further distinguish them from the prior art. For instance, Applicant traverses the assertion of the Office Action that the claimed pulse spacing of claims 9 and 39 is obvious. The relatively quick spacing of the recited pulses, which is not suggested in any of the cited prior art, facilitates the uniform initiation of the claimed contraction with relatively smaller quantities and durations of applied voltage.

The much slower pulses of Kallock, for example, are by design too slow to cause a contraction, let alone a contraction sequence effective to progressively stimulate and create tension in a musculature toward the center, while holding the previously toggled sarcamere bridges in position.

Similarly, no combination of Kallock with another prior art reference suggests or motivates the invention as recited in claim 1. For instance, while Schulman discloses an implanted microstimulator for stimulating tissue, Schulman does not suggest or motivate initiating a contraction within a musculature. Claims 17 and 45 are thus patentable over a combination of Kallock and Schulman.

Comments to those above claims apply to substantially similar apparatus claims 31-33, 35-36, 38, 41-43, 47 and 49-56, and these claims are thus novel and non-obvious over the prior art.

In summary, Applicant respectfully submits that all pending claims are novel and non-obvious over the prior art of record. Reconsideration and allowance of all pending claims are therefore respectfully requested. If the Examiner has any questions regarding the foregoing, or which might otherwise further this case onto allowance, the Examiner may contact the undersigned at (513) 241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

2/22/05  
Date



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